

REMARKS

Claims 11-14 and 16-17 are now pending in the application. Claims 11-14 and 16-17 stand rejected. Claims 11 and 17 have been amended to recite "consisting of" to replace the transition phrase "comprising." No new matter has been presented. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 112

Claims 11-14 and 16-17 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is respectfully traversed.

Applicants respectfully assert that the Examiner has not made a *prima facie* case that the specification fails to comply with the written description requirement. MPEP 2163.04 recites:

"If applicant amends the claims and points out where and/or how the originally filed disclosure supports the amendment(s), and the examiner finds that the disclosure does not reasonably convey that the inventor had possession of the subject matter of the amendment at the time of the filing of the application, the examiner has the initial burden of presenting evidence or reasoning to explain why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims."

The Examiner states that there is no description of flat sheets, the sequence of forming flat sheets, or the use of superplastic flat sheets. The Examiner has not provided evidence or reasoning to explain why persons skilled in the art would not recognize a description of Applicants' claimed invention as amended. More notably, the Examiner has not addressed Applicants' unequivocal statement that "[a]lthough the

sheet metal 104 has an arc length surface curvature by an angularity of at least 30 degrees as shown in angle 102, **the method is equally applicable to flat sheets.**" Paragraph [0019], emphasis original. Such language provides adequate proof that there is adequate written description.

To comply with the written description requirement, "each claim limitation must be **expressly, implicitly, or inherently** supported in the originally filed disclosure." MPEP 2163(II)(A)(3)(b), emphasis original. Further, "[a]n applicant shows possession of the claimed invention by describing the claimed invention with all of its limitations using such description means and words, structures, figures, diagrams, and formulas that fully set forth the claimed invention." MPEP 2163.02 *citing* Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572, 41 USPQ2s 1961, 1966 (Fed. Cir. 1997). Applicants have provided express, implicit, and inherent support for the incorporation of flat sheets into the claimed invention. Applicants have explicitly said that **the method is equally applicable to flat sheets.**" Paragraph [0019], emphasis original. The related methods are elaborately explained throughout the specification and well-supported by the Figures.

Further, Applicants respectfully assert that the extensive detail of the various methods of making the composite structure are transferrable to flat sheets to a practitioner. The practitioner would not review Applicants' Paragraph [0019] in isolation, but would review the entirety of the disclosure and teachings as related to curved sheets and "equally appl[y]" the teachings to the flat sheets.

Accordingly, the § 112, first paragraph written description rejection is improper. Reconsideration and removal of the rejection of the claims are respectfully requested.

OBJECTION TO SPECIFICATION

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). The Examiner asserts that the only reference to a “flat” sheet that has been readily found in the original disclosure has been found in paragraph [0019] where it is described that the “method is equally applicable to flat sheets”. The Examiner asserts that the disclosure must provide an antecedent basis for the process steps described in the claims.

Applicants respectfully disagree with and traverse the Examiner’s objection. Applicants believe that the extensive detail of the various methods of making the composite structure and the language **“the method is equally applicable to flat sheets”** are adequate to provide proper antecedent basis for the claimed subject matter. Applicants request that the objection to the specification be withdrawn.

REJECTION UNDER 35 U.S.C. § 103

Claims 11-14 and 16 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Seeliger (U.S. Pat. No. 6,090,232) in view of Rashid (U.S. Pat. No. 6,253,588). This rejection is respectfully traversed.

Claim 17 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Seeliger (U.S. Pat. No. 6,090,232) in view of Baumeister (U.S. Pat. No. 5,151,246) and further in view of Rashid (U.S. Pat. No. 6,253,588). This rejection is respectfully traversed.

At the outset, Applicants would like to point out that claims 11 and 17 have been amended to recite that the methods are “consisting of” instead of “comprise” the listed claim elements. The Examiner states that the previously presented claims did “not

exclude additional, unrecited elements or method steps such as further molding the precursor structure before insertion into the forming tool curved cavity.” Office Action at Page 10. Applicants claims as amended do not include further molding of the precursor structure before insertion into the forming tool.

To the contrary, Seeliger et al. discloses that the piece to be molded needs to be “semi-finished” and “must already have its final contour, since a further contouring by the foaming of the semi-finished molded product 7 into a component 1 no longer brings about any molding of this side 10.” Column 3, lines 42-50, emphasis original. Applicants respectfully disagree that a piece “already hav[ing] its final contour” is similar to Applicants’ flat sheets. There is no evidence or suggestion in Seeliger of a configuration which uses only a flat sheet. See, *Ex Parte Katoh et al*, Appeal 20071460, Decided May 29, 2007. To the contrary, the Seeliger et al. teachings are inapposite to Applicants’ claimed invention as amended. Specifically, at Column 3, lines 41-59, Seeliger recites:

For this purpose, the semi-finished molded product 7 is placed in a foaming mold 9, and the foaming is effected in situ in the foaming mold 9. **One wall 12 of the foaming mold 9 supports a side 10 of the semi-finished molded product 7 essentially over its surface, so that this side 10 must already have its final contour, since a further contouring by the foaming of the semi-finished molded product 7 into a component 1 no longer brings about any molding of this side 10.**(Emphasis added).

In light of the mandate of Seeliger, Applicant respectfully asserts that the rejection is insufficient because the Office has not provided “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), cited in *KSR Int’l v. Teleflex Inc.*, 127 S.Ct. 1727, 82 USPQ2d 1385 (2007). The assertion that Seeliger can be modified to use

only flat sheets is not presented in light of a rational underpinning because Seeliger clearly discloses that the side 10 must already have its final contour to be accommodated in the foaming mold. Rather, the assertion that Seeliger can be modified to use only flat sheets is conclusory, and "rejections on obviousness grounds cannot be sustained by mere conclusory statements..." *Id.*

As such, Applicants submit that Seeliger et al. teaches away from Applicants' claimed invention as amended, and that the Office has not provided "articulated reasoning with some rational underpinning" to support the obviousness rejection. Therefore Applicants submit that one skilled in the art would not look to combine Seeliger et al. with Rashid et al. to form the claimed invention.

Applicants further maintain that the addition of Rashid et al., directed to quick plastic forming, does not provide the parameters lacking in Seeliger et al. to provide Applicants' specific foaming and shaping of the materials to form the composite structure. Moreover, neither Rashid et al. nor Seeliger et al. provides direction or incentive to combine the teachings or to combine the teachings while eliminating the "must already have its final contour" mandate set by Seeliger et al. Applicants respectfully assert that an elimination of the Seeliger et al. mandate destroys the Seeliger et al. reference. Applicants further respectfully assert that to arrive at Applicants' claimed invention as amended upon combining Rashid et al. and Seeliger et al. and selectively omitting the mandate set by Seeliger et al., is only achieved using hindsight.

As the combination of Seeliger et al. and Rashid et al. does not teach or suggest Applicants' claimed invention as amended, and the application of hindsight is impermissible, the §103 rejection is improper. Reconsideration and removal of the claim objections are respectfully requested.

Claim 17 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Seeliger et al. in view of Baumeister (U.S. Patent No. 5,151,246) and further in view of Rashid et al. This rejection is respectfully traversed.

The addition of Baumeister does not remedy the shortcomings of the combination of Seeliger et al. and Rashid et al. Baumeister merely details the materials and does not provide further guidance regarding taking a flat metal sheet, foaming precursors attached to the flat metal sheet layer, and shaping the flat metal sheet layer in a forming tool cavity such that the flat metal sheet layer assumes the curved dimensions of the forming tool cavity.

As the addition of Baumeister does not remedy the shortcomings of Seeliger et al. and Rashid et al., the §103 rejection is improper. Reconsideration and removal of the claim rejections are respectfully requested.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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